



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0730; Directorate Identifier 2012-SW-048-AD;

Amendment 39-17124; AD 2012-14-10]

RIN 2120-AA64

Airworthiness Directives; Boeing Vertol (Type Certificate currently held by Columbia Helicopters, Inc. (CHI)) and Kawasaki Heavy Industries, Limited Helicopters (Kawasaki)

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for CHI Model 107-II and Kawasaki Model KV107-II and KV107-IIA helicopters. This AD requires, before further flight, replacing certain upper collective pitch control yoke bolts. This AD is prompted by three failures of the affected bolts. These actions are intended to prevent failure of an upper collective pitch control yoke bolt (bolt), excessive vibration, migration of the shafts, and subsequent loss of control of the helicopter.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

EXAMINING THE AD DOCKET: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact Columbia Helicopters, Inc.; 14452 Arndt Road NE, Aurora, OR 97002; telephone (503) 678-1222; email ContactEngineering@colheli.com; or at www.ColHeli.com. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Kathleen Arrigotti, Aviation Safety Engineer, Seattle Aircraft Certification Office, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW, Renton, Washington 98057; telephone (425) 917-6426; email kathleen.arrigotti@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

We are adopting a new AD for CHI Model 107-II and Kawasaki Model KV107-II and KV107-IIA helicopters. This AD requires replacing certain part-numbered bolts. The bolts are located in the forward and aft rotor upper collective pitch control assemblies.

Upon failure, the yoke bolt head shears off, allowing shafts around the bolt to migrate out of place. If the shaft migrates fully out of place, the rotor pitch cannot be controlled. This AD is prompted by multiple failures of the affected bolts at low flight hours. These actions are intended to prevent failure of a bolt, excessive vibration, migration of the shafts, and subsequent loss of control of the helicopter.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other helicopters of the same type designs.

Related Service Information

CHI issued Service Bulletin No. 107-27-0005 (SB), Revision 0, dated April 26, 2012. The SB specifies replacing all bolts, part number (P/N) 107C2733-1 and P/N 107C2733-2, with bolts, P/N C07C2700-1. The SB also specifies modifying spare assemblies, daily inspections of the yoke bolt retaining nut, and recurring 35-hour inspections of the bolt.

AD Requirements

This AD requires, before further flight, replacing all affected bolts with airworthy bolts, P/N C07C2700-1, and torquing the nut to 450-500 in-lbs. This AD also prohibits installing washer P/N A02C3112-13 with bolt P/N C07C2700-1, and installing bolt P/N 107C2733-1 and P/N 107C2733-2 on any helicopter.

Differences between this AD and the Service Information

The CHI SB requires a repetitive daily inspection of the yoke bolt retaining nut, and a repetitive 35-hour inspection of the bolts after replacement. This AD does not

require those inspections. The SB also specifies modifying spare assemblies. This AD does not address parts that are not installed.

Costs of Compliance

We estimate that this AD will affect 12 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD: Replacing the bolts will take 4 hours at an average labor rate of \$85 per work hour. Required parts will cost \$2,000. The total cost per helicopter is \$2,340 and the total cost for the entire U.S. fleet is \$28,080.

FAA's Justification and Determination of the Effective Date

Providing an opportunity for public comments before adopting these AD requirements would delay implementing the safety actions needed to correct a previously described known critical unsafe condition, which can adversely affect the structural integrity and controllability of the helicopter. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because the required corrective actions must be accomplished before further flight.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in less than 30 days.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

“Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-14-10 **BOEING VERTOL (TYPE CERTIFICATE CURRENTLY HELD BY COLUMBIA HELICOPTERS, INC.) AND KAWASAKI HEAVY INDUSTRIES, LIMITED HELICOPTERS:** Amendment 39-17124; Docket No. FAA-2012-0730; Directorate Identifier 2012-SW-048-AD.

(a) Applicability.

This AD applies to Boeing Vertol (type certificate currently held by Columbia Helicopters, Inc. (CHI)) Model 107-II and Kawasaki Heavy Industries, Limited Model KV107-II and KV107-IIA helicopters with an upper collective pitch control assembly, part number (P/N) 107CK003-2 or 107CK002-2, installed, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as failure of an upper collective pitch control yoke bolt (bolt). This condition could result in excessive vibration, migration of the shafts, and subsequent loss of control of the helicopter.

(c) Effective Date.

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance.

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions.

Before further flight, replace bolts, P/N 107C2733-1 and P/N 107C2733-2, with airworthy bolts, P/N C07C2700-1. Torque each nut to 450-500 in-lbs. Do not install a washer, P/N A02C3112-13 with a bolt, P/N C07C2700-1. Do not install bolts, P/N 107C2733-1 and P/N 107C2733-2, on any helicopter.

(f) Alternative Methods of Compliance (AMOCs).

(1) The Manager, Seattle Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Kathleen Arrigotti, Aviation Safety Engineer, Seattle Aircraft Certification Office, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW, Renton, Washington 98057; telephone (425) 917-6426; email 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or

lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this EAD through an AMOC.

(g) Additional Information.

CHI Service Bulletin No. 107-27-0005 (SB), Revision 0, dated April 26, 2012, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Columbia Helicopters, Inc.; 14452 Arndt Road NE, Aurora, OR 97002; telephone (503) 678-1222; email ContactEngineering@colheli.com; or at www.ColHeli.com. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(h) Subject.

Joint Aircraft Service Component (JASC) Code: 6230 Main Rotor
Mast/Swashplate.

Issued in Fort Worth, Texas, on July 5, 2012.

Kim Smith,
Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2012-17278 Filed 07/20/2012 at 8:45 am; Publication Date: 07/23/2012]